Service Date: November 18, 1988

DEPARTMENT OF PUBLIC SERVICE REGULATION
BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MONTANA

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IN THE MATTER Of The Application of) MONTANA-DAKOTA UTILITIES COMPANY to) Revise The Language of Gas Trans-) portation Rates 81, 82 and 97.)	UTILITY DIVISION DOCKET NO. 87.1.8
IN THE MATTER of the Application of) MONTANA-DAKOTA UTILITIES COMPANY to) Revise Rates 81, 82 and 90, and to) Implement New Rates 62, 72 and 83.)	DOCKET NO. 87.12.77
IN THE MATTER of the Application of) MONTANA-DAKOTA UTILITIES COMPANY to) Revise Rates 60, 70, 81, 82, 85,) 90 and 97 to Establish a Minimum) Usage Prior to the Application of) the Supercompressibility Factor.)	DOCKET NO. 87.10.78
IN THE MATTER of the Application of) MONTANA-DAKOTA UTILITIES COMPANY) to Revise Rates 117 and 124.)	DOCKET NO. 87.10.59
IN THE MATTER of the Application of) MONTANA-DAKOTA UTILITIES COMPANY) to Revise the Electric and Gas) Service Rate 114.)	DOCKET NO. 87.3.15 ORDER NO. 5379

FINAL ORDER

APPEARANCES

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BEFORE:

TOM MONAHAN, Commissioner, Presiding
CLYDE JARVIS, Chairman
JOHN DRISCOLL, Commissioner
HOWARD ELLIS, Commissioner
DANNY OBERG, Commissioner

INTRODUCTION

In this order the Public Service Commission (Commission) will conclude five dockets representing applications by Montana-Dakota Utilities Company (MDU). The dockets were consolidated for hearing purposes and a hearing was held in Billings, Montana on June 1 - 2, 1988. Briefs have been filed according to the schedule as amended and the Commission deems the dockets submitted for decision.

BACKGROUND

On January 23, 1987 the Commission received an application from MDU to revise the language of its gas transportation Rates 81, 82 and 97. The application was designated Docket No. 87.1.8. Following notice of the application the Commission received a protest and requests for special intervention pursuant to ARM 38.2.2404 from Exxon Corporation, Koch Hydrocarbon Company (Koch) and Western Sugar Company (Western Sugar). The requests for special intervention sought to broaden the docket to consider whether MDU's existing Montana transportation rates are fair, reasonable and nondiscriminatory. The Commission granted the requests for special intervention and thereby expanded Docket No.

87.1.8 to include complaints by Exxon, Koch and Western Sugar that MDU's Montana gas transportation rates are unreasonable, discriminatory and therefore unlawful. Following a prehearing conference a procedural order was issued on May 20, 1987 in Docket No. 87.1.8 that contemplated a hearing on December 8, 1987. In addition to Exxon, Koch and Western Sugar, intervention in the expanded docket was granted to Conoco, the Montana Consumer Counsel (MCC), Cenex, Western Gas Processors and Holly Sugar Corporation (Holly).

On December 3, 1987 the Commission received an application from MDU to revise General Gas Transportation Service Rate 81, Industrial Gas Transportation Service Rate 82 and Alternate Energy-Based Interruptible Gas Service Rate 90. In addition, MDU proposed the implementation of three new rates: Optional Seasonal Residential Gas Service Rate 62, Optional Seasonal General Gas Service Rate 72 and Standby Gas Service Rate 83. This application was designated Docket No. 87.12.77. On December 9, 1987 the Commission issued a Notice of Hearing in Docket No. 87.1.8. (The date of hearing contemplated in the procedural order had been postponed.) On December 16, 1987 the Commission received a motion from Conoco to: 1) consolidate Docket Nos. 87.1.8 and 87.12.77, 2) vacate the procedural order in Docket No. 87.1.8, and 3) issue a new procedural order in the consolidated proceeding. On December 23, 1987 the Commission voted to grant Conoco's motion in its entirety. The January 5, 1988 hearing in Docket No. 87.1.8 was vacated.

Following a scheduling conference, the Commission issued a new procedural order on February 25, 1988 covering Docket Nos. 87.1.8, 87.12.77, 87.10.78 and 87.10.59. Docket Nos. 87.10.78 and 87.10.59 represent two MDU filings received in October of 1987 not related to gas transportation. Docket No. 87.3.15, representing an application by MDU to revise its electric and gas service Rate 114, was scheduled for hearing concurrently with Docket Nos. 87.1.8, 87.12.77, 87.10.78 and 87.10.59, but was not covered by the procedural order.

Docket No. 87.1.8

At hearing MDU moved to withdraw its application that formed the basis for Docket No. 87.1.8. The motion was granted without objection. Following testimony on the remaining issue of price discrimination raised in the complaints and special intervention of Exxon, Koch, and Western Sugar, MDU moved to dismiss the price discrimination complaint of Exxon as moot. The motion was not ruled on at hearing but has been briefed by MDU and Exxon.

The Commission will grant MDU's motion, and, in addition, on its own initiative, will dismiss the complaints of Koch and Western Sugar. The complaints of Exxon and Western Sugar were based on the fact that MDU was charging them a higher rate for gas transportation than it was charging certain of their competitors. Exxon and Western Sugar argued that this constituted illegal price discrimination. MDU acknowledged that the existence of its Rates 82 and 97 constituted prima facie price discrimination, but argued it was not illegal. Because the Commission is terminating Rate 97 in this order, the basis for the complaints of price discrimination in Docket No. 87.1.8 no longer exists. It is clear the Commission cannot provide complain ants with retroactive relief. First, the Commission is not vested with judicial powers. See 69-3-103(1), MCA. Second, the specific remedy for a finding of unjust rate discrimination is prospective only. See 69-3-330(1), MCA. In light of this the Commission will not engage in an academic exercise by ruling on the merits of the complaints. The Commission will address the generic question of price discrimination in connection with flexible transportation rates in its discussion of Docket No. 87.12.77.

Docket No. 87.12.77

Tariff Revisions

In this docket MDU proposes to revise certain existing tariffs and to implement certain new tariffs. MDU proposes to revise gas transportation Rates 81 and 82 as follows: First, MDU proposes to revise the peak load qualifying criterion in Rate 81. To qualify for Rate 81 under the proposed revision a customer's interruptible peak day requirements must exceed 125 Mcf. This would replace the current peak day requirement of 25 Mcf/hour. Second, Rates 81 and 82 would have separate ceiling prices of $.883 and $.799/Mcf respectively. The proposed floor price would be $.05/Mcf under both rates. A negotiated price, within the ceiling/floor range would be indexed to alternate fuel prices and would change to stay competitive with alternate fuel prices. Third, MDU proposes to absorb part of the risk of discounted transportation prices. With both Rate 81 and 82 MDU proposes to debit 90 percent of the difference between the ceiling price and the actual sales price to the Unreflected Gas Cost Account, Federal Energy Regulatory Commission (FERC) Account No. 191. Finally, MDU proposes a $10 unauthorized overrun charge in case a customer fails to curtail or interrupt its gas use when requested to do so.

MDU proposes to revise Rate 90, which it seeks to rename "Alternate Energy Based Interruptible Gas Service." In addition to being interruptible, the intent of this tariff is clearly to retain loads (TR 183). MDU proposes to expand the availability of Rate 90 to all interruptible customers by replacing the current availability criterion, which features a minimum annual consumption of 100,000 Mcf, with a requirement that the customer's end use load must have an input rate of 25 Mcf per hour. Indexing to only No. 6 fuel oil is abolished.

Other revisions to Rate 90 include a ceiling price(s) based on the otherwise applicable sales tariffs 70 and 85, and a floor price equal to the pipeline's weighted average commodity cost of gas plus $.05/Mcf. The $.05 figure was established to correspond to the currently authorized Rate 97 level (DR MCC-37 and TR 220). MDU's proposal excludes demand costs in computing a floor price and includes a service charge only if the ceiling price is reached. Inclusion of a service charge in the ceiling price also involves the 90/10 risk sharing and debiting of Account 191. A Rate 90 price could be indexed to the relevant alternate fuel price or periodically changed to reflect MDU's judgment of the customer's "energy profile." Finally, MDU plans to change the recovery mechanism from the current 100 percent to 90 percent.

MDU's stated purpose in revising Rate 90 is to attempt to make the Company more competitive in the energy marketplace. Further, MDU holds that other classes of customers will benefit as a result of revising Rate 90.

New Tariffs

The new tariffs MDU seeks to implement, Rates 62 and 72, allow for optional seasonally differentiated prices for the Residential and General Service classes. MDU states customers will self-select the otherwise applicable tariff (Rate 60 or 70) or the optional tariff (Rate 62 or 72) based on their consumption pattern. The Company's objective is to improve system utilization through lowered off- and increased on-peak prices. MDU's load factor falls in the low 30 percent range (TR 161). This means that, on average, MDU's distribution system is used to capacity only 30 percent of the time. MDU witness Don Ball noted that purchased gas demand costs drive the seasonality of costs (Exh. No. 5, p. 5). Specifically, Mr. Ball notes that WBIP's Maximum Daily Quantity (MDQ), which is peak demand driven, is one source driving the need to seasonally differentiate prices. The proposed seasonal price differential approximates $.30.

The current residential and General Service tariffs are as noted in Table 1.

TABLE 1

Current Residential Rate 60
and General Service Rate 70 Tariffs

		Effective Commodity Price ($/DKT)	
	Basic Charge	Firm	Interruptible
Residential	$3.01	$4.603	N/A
General Service	$6.02	$4.829	$4.481

MDU proposed the optional seasonal residential and General Service tariffs listed in Table 2 below. Unlike the current General Service tariff, the Optional Seasonal tariff is only available to existing firm service loads (TR 245). Winter applies to service between September 16 and May 14, about eight months. Table 2 provides estimated commodity prices.

TABLE 2

Proposed Optional Seasonal Tariffs 62 and 72

	Basic Charge	Effective Commodity Rates ($/Dkt) Firm Winter	Summer
Rate 62 Residential	$3.01	$4.736	$4.427
Rate 72 General Service	$6.02	$5.949	$4.639

A proposal to implement standby service Rate 83 was withdrawn by MDU. The decision to withdraw stems from MDU's apparent inability to manage certain aspects of the tariff given FERC's policy on changing nominations of Maximum Daily and Annual Entitlement Quantities (AEQ), MDQ and AEQ respectively (TR 247). MDU stated it may refile a Standby rate in Montana at a later date (TR 248).

Position of the Montana Consumer Counsel

Dr. John W. Wilson testified on behalf of the MCC. The stated purpose of the MCC's testimony is to analyze MDU's flexible pricing proposals on Rates 81, 82 and 90. Dr. Wilson recommended the Commission take the following action:

a. Deny MDU's proposed automatic recovery of "flexible pricing" deficiencies.

b. Reject MDU's argument to replace cost of service rate-making with an approach that allocates a disproportionate share of costs to customers with inelastic loads.

c. Consider the anticompetitive implications of sanctioning a discriminatory pricing policy that does not track cost responsibility.

d. Recognize that MDU's proposed pricing policy is part of a corporate strategy to advance the consolidated economic interest of MDU Resources Group, Inc. (MDU Resources Group).

e. Recognize that if prices exceed variable costs no "revenue deficiency" necessarily occurs.

f. Put off until a general rate case consideration of allowing MDU to recover core market customers' costs related to discounts on Rates 81, 82 and 90.

The following expands on certain of Dr. Wilson's proposals. First, Dr. Wilson supports FERC's "modified fixed-variable" (MFV) cost allocation scheme, noting the MFV is a reasonable compromise (DR PSC-505). However, Dr. Wilson also cites a FERC decision which questions the merits of abandoning the Seaboard approach.

Second, Dr. Wilson holds it is not proper to shift revenue requirements from customers in competitive markets to customers in relatively less competitive markets. Dr. Wilson holds the Commission must rely on cost-based rates in order to achieve the objectives of conservation, efficiency and equity, and to avoid "cross subsidization." Dr. Wilson stated that if MDU's shareholders absorbed 100 percent, instead of 10 percent, of the difference between the otherwise applicable rate and the discounted price, cross subsidy issues would be essentially removed (DR PSC-504). In this regard, Dr. Wilson holds the Commission should discourage "uneconomic bypass." Uneconomic bypass is commonly held to result from charging a price that exceeds cost, with the result that a customer reduces its consumption lower than it would if price were lowered to cost.

Third, Dr. Wilson believes the floor price on each of Rates 81, 82 and 90 will become ceiling prices. Thus, given MDU's proposed 90/10 sharing core customers will, via the purchased gas adjustment (PGA) mechanism, ultimately have to recover Rate 81, 82 and 90 distribution costs.

Fourth, Dr. Wilson suggests that MDU's proposed flexible pricing may amount to unreasonable price discrimination. Dr. Wilson recommends rejecting MDU's flexible pricing proposal in this case, but notes pricing flexibility may be reasonable if it does not impose higher charges on other customers (DR PSC-508).

Fifth, on economic efficiency issues, Dr. Wilson holds that when "distribution capacity is fixed, but ... not scarce, there is no pure economic efficiency justification for recovering capacity costs..." (Exh. MCC-1, p. 26). Dr. Wilson concedes that some fixed cost recovery, in excess of variable costs, is preferable to none at all. However, Dr. Wilson questions the effort MDU will make to maximize fixed cost contributions. In this regard, unnecessarily granted discounts could offset any gains from necessary discounts. In summary, Dr. Wilson holds there should be "no provision for assessing the amount of such discounts to core market customers" (Id., p. 31).

Sixth, Dr. Wilson strongly opposes recovery of any discounts via a PGA mechanism. He sees a link between the propos als by MDU in the present docket and WBIP corporate behavior. Dr. Wilson alleges that MDU's proposals in this docket effectively allows WBIP to shift costs to MDU. His conclusion is that the result is to benefit MDU Resources Group at the expense of MDU ratepayers.

Finally, as regards optional seasonal tariffs it should be noted that while Dr. Wilson did not explicitly testify on MDU's proposal, the MCC supports the MDQ allocation mechanism contained therein (DR PSC 505-b).

COMMISSION DISCUSSION

Ratemaking Objectives

There are three primary functions of public utility pricing, all of which share the common objective of economic efficiency: 1) the capital attraction function, 2) the efficiency incentive function which attempts first to equate price and cost for a product and second to compel competitors to reduce their own costs, and 3) the consumer rationing function which holds consumer sovereignty reigns supreme as the most fundamental principle of price theory: prices are designed to allow individuals to voluntarily decide whether or not to demand public utility services.

Regulation by the Montana Commission has recognized and implemented these ratemaking objectives. The Commission's objectives in this docket include allowing MDU an opportunity to recover its revenue requirement and at the same time efficiently allocate resources. The central issue before the Commission is whether MDU's proposals in this docket further the achievement of these objectives. Flexible pricing, however, by its very nature raises price discrimination concerns.

<u>Price Discrimination</u>

Prices approved in this order ought not be uneconomically discriminatory, but at the same time they ought to achieve the three ratemaking objectives referred to above. As Dr. Wilson notes, Commission policy should discourage uneconomic bypass (Exh. No. MCC-1, p. 20). Balancing these concerns is complicated.

An example of prima facie price discrimination is when a seller charges different prices for a commodity having the same cost. However, because different prices exist for a commodity does not mean necessarily that the seller is engaging in unreasonable or illegal price discrimination. Price discrimination as reflected in flexible rates is commonly held reasonable when customers have different demand elasticities.

There are three degrees of price discrimination and a utility may price discriminate in more than one degree at the same time. First-degree price discrimination is a limiting case in which all of the consumer's surplus is extracted, and may occur when a monopolist has a small number of buyers and knows the maximum price each will pay. Second-degree price discrimination is commonly held to occur on an intraclass basis, while third-degree price discrimination is commonly held to occur on an inter-class basis.

MDU's pricing proposals in these dockets reflect a mix of the above degrees of price discrimination. MDU's flexible pricing proposals appear to reflect first-degree price discrimination with the caveat that price cannot recover more than the margin (DR PSC-118). MDU's proposed optional seasonal prices or the existing tariffs are average prices across many different customers within a given class and for which the cost of service varies. Thus, these later examples reflect second-degree price discrimination.

Under certain conditions price discrimination is economically justified. Marginal cost pricing justifies, at the extreme, a separate price for every sale. Marginal cost pricing does not justify uneconomic price discrimination: prices that do not reflect marginal cost violate the dictates of economic efficiency. If costs vary between customers, such customers could be individual classes. In fact, MDU's flexible pricing proposal appears, in part, based on this principle (DR PSC-49-iv).

Discriminatory price reductions are not only justifiable but economically desirable and should be encouraged under certain conditions. Three commonly cited conditions include:

a) Average total costs of providing the service exceed relevant marginal costs for the incremental business.

b) Absent lower prices incremental load will not emerge.

c) Demand is elastic such that net revenues result.

Although the above conditions may exist, one must exercise caution in selectively discounting prices in the case that the customer receiving the discount is in competition with either the utility, or another retail company not receiving the discount. If a utility takes business away from its competitors at rates that cover incremental costs, both efficiency in the performance of the utility function and the interest of all ratepayers recommend it being allowed to do so. Dr. Wilson supports the need for a proper marginal cost study to allocate costs to classes (DR PSC-507).

The relevant incremental costs and resulting rates depend on the market structure and extent of competition in the market place and the term of approval. MDU's proposed floor prices appear based on short-run costs. MCC's testimony appears to reflect the concern that floor prices should exceed long-run costs in the presence of prima facie price discrimination. The relevant choice could logically reflect a combination of the two perspectives. In addition, the degree to which flexible pricing is allowed should depend on the market situation. A discussion of the energy market structure in which MDU competes follows.

Market Structure

Energy markets are multifaceted. There exist numerous suppliers of alternate fuels all of which compete for the business of end users' energy needs. End users' options vary depending upon the end use to which the fuels are put. MDU is just one of many fuel providers in its market area. While the energy markets are competitive MDU remains, by and large, a monopoly provider of the natural gas distribution network. In the face of this complexity the Commission must set prices that achieve certain established objectives.

MDU Resources Group is a vertically integrated company providing energy services. MDU, a division of MDU Resources Group, is a local distribution company and also provides gas transportation. Williston Basin Interstate Pipeline (WBIP), a subsidiary of MDU Resources Group, is an interstate gas pipeline that, until recently, was MDU's only gas supplier. Both MDU and WBIP presently have regulatory approval to charge for transported gas on a nonflexible basis, and each seeks approval for flexible pricing. MDU seeks approval in the present docket. WBIP seeks flexible pricing in its revised August 22, 1988, Section 311 open access compliance filing with FERC.

In addition to MDU's corporate structure, the energy market in which MDU competes has numerous dimensions, all of which impact any effort to ascertain the impact of flexible pricing. First, MDU competes with certain of the oil companies to satisfy end users' energy needs. Second, these oil companies compete with one another, as do Holly and Western Sugar. Third, MDU either competes with its affiliate WBIP for a share of the economic rent extractable from shippers of gas over the distribution system (TR 163-165 and DR PSC-117-iii), or cooperates with WBIP to maximize MDU Resources Group revenues (TR 166).

With this market structure as background, the Commission will review the revenue impact of various alternative degrees of flexible pricing for Rate 82. In the Commission's view MDU has been overly simplistic in computing the revenue impact of its flexible pricing proposal.

Revenue Estimates

As noted above this section discusses the revenue impact of various flexible pricing scenarios for Rate 82. One reason for this discussion stems from MDU's portrayal of a nonexistent level of simplicity involved in analyzing the revenue impacts of alternate degrees of pricing flexibility.

The first scenario involves the revenue impact of alternative average levels of Rate 82. That is, the revenue impact of charging each potential customer served under Rate 82 the same average price is computed for various alternative average prices.

MDU computed the revenue impact of various levels of average Rate 82 transportation prices in response to data requests (see DR Exxon No. 11, DR MCC No. 16 and DR PSC-119). Certain key assumptions in the data response to the MCC are of interest and include: 1) MDU's transportation price, 2) WBIP's transportation price (held constant at $.20/Mcf), 3) the alternative fuel costs and heat value (which varied by customer), and 4) the total volume of a customer's load that is elastic. MDU held constant all but MDU's transportation price, which was varied from a low level of $.05 up to $1.00 per unit of measure.

Based on these assumptions, MDU computed the total margin for the above range in average Rate 82 prices. This analysis resulted in an optimal average MDU transportation price of roughly $.60/Mcf. The associated revenue roughly equals $1.7 million (DR MCC-16). Thus, on average, aggregate Rate 82 demand is inelastic for MDU transportation prices increasing up to $.60/Mcf. An $.80/Mcf MDU price only generates $507,072 in revenues. At higher prices demand is relatively more elastic.

Some general comments are of interest with regard to the revenue outcome in the above scenario. First, in terms of total transportation costs to all potential industrial gas loads, MDU Resources Group appears to maximize its total margin with roughly an $.80/Mcf combined transportation charge. However, an assumed average WBIP transport charge is an unreal assumption given WBIP's compliance Open Access filing with FERC. Second, the total revenues generated of roughly $1.7 million appear to exceed the margin based revenues out of Docket No. 85.7.30. Third, this revenue optimization analysis is an estimate and only reflects the impacts with Rate 82 customers. The fact that Rate 81 and Rate 90 pricing could also be flexible complicates an overall estimate of revenue impacts, not to mention synergistic impacts. Fourth, MDU's assumed alternative fuel price for Gary Williams, of $2.18/million

Btu appears in error. The tariffed rate for this customer is not on the order of $.007/kwh. Gary Williams is one of several potential Rate 82 gas transportation customers. MDU appears to have understated the alternative fuel cost of Gary Williams when computing optimal revenues from Williams.

The second scenario relaxes the "average transportation price" constraint imposed above. That is, we now pose the question: How would MDU's total industrial transportation revenues change vis-a-vis the first scenario if the only change were to allow MDU to practice constrained first-degree price discrimination?

Critical to this second scenario is our assumption, especially as regards WBIP's transportation price, that the producer's gas price and the alternative fuel costs remain fixed. Unlike with the first scenario MDU has not tabulated the revenue impacts resulting from first degree price discrimination, the second scenario (DR MCC-16).

The expected results of this second scenario, vis-a-vis the first, are of particular interest. One would expect greater revenues in this second scenario than in the first. That is an <u>average</u> price disallows MDU from lowering its price to capture loads using alternative fuels, but which would use gas if the gas price were lowered. That is, whereas when MDU charges the same average price to each customer the revenues approximate $1.7 million, when MDU is allowed to first-degree price discriminate revenues should clearly exceed $1.7 million.

To summarize, the Commission's main concern regards MDU's ability to maximize the revenues it generates with a flexible transportation price given the bargaining power of other special interests. Will the floor and ceiling price become one in the same as Dr. Wilson suggests? Will it benefit MDU Resources Group if MDU and WBIP cooperate in the process of arriving at their respective transportation rates if each is allowed to flexibly price? Stated differently, is MDU Resources Group indifferent whether the marginal revenue dollar derives from MDU or WBIP? How will MDU Resources Group achieve the objective of consolidated profit maximization? (DR PSC-501-ii) MDU's own testimony suggests WBIP has the upper hand in negotiating transportation prices to the extent the two entities compete for revenue dollars, as it appears they will (TR 166, 218).

<u>Decision</u>

In general, the Commission supports flexible pricing. Certain concerns, however, cause the Commission to approve flexible pricing in this docket on a short-run basis only. Longer term approval requires knowledge or the relevant cost/price constraints and revenue impacts (Exh. No. MCC-1, pp. 18, 21 and DR PSC-507).

For each of transportation Rates 81 and 82, and Rate 90 the Commission finds MDU should be allowed flexible pricing. The degree of pricing flexibility the Commission authorizes MDU to implement is that which the Company proposed but with certain changes. The changes are in regard to the following: 1) relevant floor and ceiling prices, 2) Account 191, 3) the 90/10 risk sharing, 3) the term of approval, and 4) frequency of price changes.

The Commission finds merit in allowing MDU full first-degree price discrimination flexibility. However, the absence of customer specific cost information causes the Commission to move slowly in this area and in turn require the sunset provisions discussed below.

The Commission notes that the parties to this docket have quite different expectations with respect to what flexible pricing will mean. First, MDU stated it would drive very hard bargains with end users, lowering its prospective transportation price only after proof exists of imminent load loss (TR 164). On the other hand, Dr. Wilson believes that flexible prices will fall to their respective floors (Exh. No. MCC-1, p. 22). In contrast, Exxon appears to warn that any flexible pricing result that would charge Exxon more than a competitor would be unduly discriminatory (TR 350). Exxon does, however, support flexible pricing (TR 37, 73-75,). Western Sugar believes it will be able to negotiate lower than ceiling prices in spite of the fact they currently pay ceiling prices (TR 104 and Late Filed Exhibit No. 3), a position MDU holds will not occur unless cost justified.

Cost Studies

The Commission finds inadequate the cost evidence to support other than a short-term life for MDU's proposed flexible rates. If care is not exercised, a customer could be sold gas at a price that exceeds its short-run incremental cost but which falls below the long-run marginal cost of supply. This is clearly a concern if a tariff has no sunset. Dr. Wilson also expressed concern for a properly computed marginal cost study (DR PSC-507).

Because of costing concerns these tariffs will automatically terminate 15 months after final approval. Continued flexibility may be granted upon MDU's filing and Commission consideration of a long-run marginal cost study for service on all rates and tariffs, but especially Rates 81, 82 and 90. If a proceeding is not completed at the end of 15 months, all transportation service will be priced at the last tariffed "margin" based prices. Similarly, service on Rate 90 will revert to the otherwise applicable tariff.

In approving MDU's flexible pricing proposal the Commission finds merit in allowing MDU to frequently change its average price on each of Rates 81, 82 and 90. MDU is permitted to change the price charged each customer no more frequently than once per month during the 15 month temporary approval. This will allow MDU to compete within the below noted price bounds.

Although the types of costs that are relevant in a long-run study will be debated at a future date, MDU is hereby advised of certain cost concerns of the Commission. First, since MDU's flexible pricing proposal involves first-degree price discrimination, costs must be disaggregated to the customer level. In the case of Rate 82 service this should not be too burdensome given the small number of industrial customers served by MDU. Second, of particularly concern are the transaction costs incurred by MDU in providing transportation service to any customer type. In this regard the minimum volume requirements must be cost justified. Third, the cost justification for interruptible, retention and standby (if refiled) service must be provided. Finally, flexible price floors that vary by season should be investigated. Empirical analysis of optimal off-peak/ on-peak seasons could be quite useful cost/price information.

Floor Prices

The Commission first finds that the floor prices for these tariffs must be revised upward to reflect certain con-cerns. Much evidence surfaced in this docket that the proposed $.05/Mcf floor price is uneconomic. In part, MDU's floor price for Rate 90 provides justification for raising the floor price on Rates 81 and 82. With Rate 90, MDU proposed a floor equal to the weighted average cost of gas (WACOG). The WACOG, in turn, includes gas and nongas commodity costs plus two adders. The two adders include line losses of $.07877 and a floor of $.05.

Transferring the analysis of the Rate 90 floor to Rates 81 and 82, the Commission finds first that the $.05 floor in Rates 81 and 82 apparently excludes line losses, otherwise MDU would not propose a separate line loss adjustment on Rate 90. Second, the $.05 value has a common basis as used in Rates 81, 82 and 90 (TR 220). Third, and most importantly, MDU admits that line losses associated with transported gas are unreflected in any transportation volumes:

> Rate 82 implicitly has a loss component because it mirrors the sales rate margin. Rate 97 has no loss component. However, MDU incurs no line losses for <u>either</u> service, because the distribution meter is used as the measure of gas transported by Williston Basin. (DR PSC-49i, emphasis added)
>
> In the example cited, if CENEX were metered for 10 MCF, does the Company mean to suggest that if line losses were 10% that 11 Mcf were input into WBIP's system, and one Mcf lost along the way to the CENEX meter?
>
> Yes. (DR PSC-108 and TR 227)

The above responses by MDU indicate to the Commission that MDU's proposed floor prices on Rates 81 and 82 exclude any line loss based cost adjustment. Whether MDU incurs distribution line losses with sales to interruptible industrial customers depends on the individual customer: line losses will vary with the customer's proximity to WBIP's system (DR PSC-24). One issue then, involves a reasonable line loss adjustment. Obviously, if in order to consume 10 Mcf, 11 must be injected, but only 10 Mcf are injected, the difference derives from system supply. System supply has a line loss-related cost of $.07877/Mcf (DR PSC-107).

The validity of the $.05 charge can be questioned further. In the response to Commission data request number 46 MDU revised this charge to a minimum of $.0894/Mcf. Although the Commission believes marginal costs are the relevant costs over the long run, this latter value of $.0894 has merit until such time as MDU addresses concerns that prices exceed long-run incremental costs. Then, when combined with the above $.07877 line loss cost, the floor equals roughly $.17/Mcf.

To err on the side of overestimating relevant costs, the Commission finds the above $.17/Mcf figure should be rounded to $.20/Mcf (or Dkt). This value will serve as the floor price on Rates 81 and 82 for the 15 month duration of their approval in this order. The same $.20 figure must replace the two above adders on Rate 90, again for the short-term duration of that tariff. The Commission fully recognizes that the result mixes short-run losses with historical embedded costs. This is one reason why only short-term approval of flexible pricing is being allowed. Relevant marginal costs should replace embedded costs.

Service Charges

Another concern regards the inclusion of service charges on Rates 81, 82 and 90. These charges are only included to the extent the ceiling price is charged (DR PSC-112). If transportation customers have ceased Rate 70 or Rate 85 service, then MDU no longer collects the associated service charge, unless of course the ceiling price is charged. For the short term, the Commission finds MDU must assess Rate 81 and 82 customers the respective Rate 70 and 85 service charges unless the customers incur the Rate 70 or 85 service charge. Further, since the Commission approves of Rate 90 pending any revisions stemming from a marginal cost study, that tariff must also include a service charge for customers not served on Rates 70 or 85, but who take service on Rate 90. MDU must revise the tariff(s) to reference the respective firm tariff's service charge.

Account 191

The Commission has several concerns with respect to MDU's Account 191 proposal. The concerns include debits and credits to the account, including service charges in the ceiling prices of flexibly priced tariffs and whether there should be an account at all (TR 158). With MDU's proposal, Account 191 would be debited for all incremental sales volumes up to the "representative level of volumes" under any of Rates 81, 82 or 90. Deficiencies on Rate 90 are already debited to Account 191. The converse, a crediting provision, was not included in MDU's proposal. However, if the elasticities are such that net revenues are generated, crediting would be an additional issue.

First, it is not clear that a "representative level of volumes" is the appropriate test. Further, WBIP pricing changes since Docket No. 85.7.30 have complicated the issue. Based on Docket No. 85.7.30, representative levels of sales volumes for industrial sales (Rate 85) and transportation volumes (Rate 97) appear to equal 1.603 and 1.084 Bcf respectively (MDU data responses No. 1 and 4 to Exxon), for a total of 2.687 Bcf. In 1987 total transportation volumes on Rate 97 and 82 equalled 1.639 and .460 Bcf respectively, while Rate 85 sales volumes equalled .266

Bcf for a total of 2.365 Bcf (see TR 68, but contrast Late Filed Exhibit No. 3). Although not an example of clarity, MDU also noted in Late Filed Exhibit No. 1 that the maximum incremental throughput equals about 1.095 Bcf.

Second, numerous changes have occurred or are in the offing since Docket No. 85.7.30 concluded. MDU, has transported gas on Rates 81 and 82. Rate 97 will be eliminated in this order as a transportation offering. A deep cut in the Rate 90 floor price will occur. MDU will receive pricing flexibility to maximize revenues.

Third, certain accounting changes may, or, have occurred. In this regard, the removal of AEQ and MDQ demand costs from the Rate 90 floor appears to increase the fixed costs to be recovered. The Commission understands that there has been no recent sales under Rate 90. As an aside, the Commission would note that Account 191 should not be debited for the revenue dif ference between the Seasonal and otherwise applicable tariffs as the record suggests (TR 249).

A final concern regards MDU's inclusion of service charges in the ceiling price for purposes of debiting Account 191. However, given the Commission denies any debiting of Account 191, the issue is moot.

For the above reasons the Commission will not approve debiting of Account 191 as regards Rates 81 and 82. MDU will have to file a revenue requirements case to recover any revenue shortfall.

Risk Sharing

The Commission finds unnecessary the 90/10 risk sharing for revenue differentials between the otherwise applicable rate (OAR) and the respective Rate 81, 82 or 90 price. The degree of risk sharing will be fully addressed in MDU's next revenue requirement rate case.

Rate 97

The Commission finds that based on costs Rate 97's $.05 price is uneconomic. The Commission indicated in earlier dockets that the price level on this tariff should receive continued scrutiny. The time has come to replace this tariff with one having a more sound basis. Rate 97 is hereby terminated.

Interruptibility

MDU's historic need to interrupt loads is of interest. First, interruptions occur infrequently (DR PSC-39). Since 1980, MDU has interrupted Montana customers on two occasions: 1) December 20-26 of 1983 and 2) November 18-29 of 1985. Of nearly 30 Bcf of gas sold that could have been interrupted since 1980, only about 150,000 Mcf were actually interrupted on the occasions noted above (DR PSC-114). It appears, however, that future interruptions will be more frequent. First, MDU noted that typical interruptions on its system mirror interruptions WBIP imposes to preserve the integrity of service on its interstate system (DR PSC-41).

Second, MDU Resources Group must be concerned with consolidated profitability. MDU noted that distribution level transportation customers will likely be interrupted when opportunities exist for WBIP to maximize revenues via off system sales (DR PSC-106, 117 and TR 218). That is, although the distribution system may not be capacity constrained, if gas shipped off-system generated greater net revenues and the transmission system is capacity constrained, WBIP will likely interrupt transported gas to the MDU distribution system. The probability of such an occurrence, of course, relates to constraints imposed on MDU's ability to flexibly price and MDU Resources Group's profitability objectives.

While interruptible load is theoretically and practically valuable, interruptibility should not be used as an excuse to discount prices. On the other hand if discounting is necessary to retain load, and if the discounting is economic, it makes sense to condition the discount on interruptibility of service if the end user agrees. Seldom has the Company or an intervenor analyzed the stand-alone merit of interruptibility.

If MDU incurs any unauthorized overrun charges related to G-1 service, and at the time the overrun is incurred MDU could have interrupted an interruptible customer, all such overrun charges shall be costs included only in the cost of service for the interruptible class.

Standby Rates

MDU proposed and then withdrew its Montana Standby tariff. The basis for MDU's selective withdrawal puzzles the Commission (DR PSC-110). If the true reason for the withdrawal is complicating MDQ/AEQ costing and pricing, then Montana is not unique. MDU nominates such volumes for each state (DR PSC-101 and TR 216, 246). Because of the apparent relation between standby service and other issues, for example AEQ nominations and overrun charges, the Commission will not entertain a refiling out of the context of a cost of service filing.

Optional Seasonal Prices: Rates 62 and 72

The Commission finds merit in and approves MDU's proposed optional seasonal tariffs. The Commission, however, finds MDU's proposal, while a move in the right direction, to be pos sibly erred. If merit exists in dividing total MDQ costs by annual firm loads, there must also be merit in basing MDQs, in part, on off-peak summer peak demands. This basis, however, appears illogical. MDU's exhibit (DRB-1) shows how the seasonal differential is computed. MDU simply divides the total current annual MDQ cost by firm sales and then makes loss and pressure adjustments. MDQ costs stem from winter peak demand, maximum daily quantities, not minimum daily quantities. As the Company notes it has a roughly 30 percent load factor due to relatively high winter peak demands (TR 254). That is, unless Ramsey pricing is the Company's objective, there appears no merit in allocating MDQ costs to summer periods, except in the case that the peak could shift to the summer months. The probability of such a shift must be very remote. MDQ costs divided by the relevant winter load would be part of a justified winter summer price difference. The optimal winter/summer seasons need defining.

Data Reporting Requirement

In approving flexible pricing the Commission departs from traditional utility pricing whereby a specific tariffed rate corresponds to each utility service. The Commission approves flexible pricing because it finds that allowing MDU to compete for elastic loads will benefit MDU and its ratepayers. The Commission also finds, however, that in the absence of a cost of service study the Commission must have access to sales volumes and revenues in order to monitor MDU's marketing effort under flexible pricing. Therefore, MDU is required to supply to the Commission, on a monthly basis, negotiated prices, volumes, and total revenues for each customer on Rates 81, 82 and 90.

Docket No. 87.3.15

This docket involves MDU's request to revise its Electric and Gas Service Rate 114. The proposed revision redefines the availability of service criteria on each tariff.

Docket No. 87.10.59

This application seeks to revise Rates 117 and 124. According to MDU, the proposed revisions are made to incorporate the Company's accounting for new service line installations into Rate 124. At present, Rate 124 only addresses replacement, relocation and repairs to existing gas service lines.

Docket No. 87.10.78

In this application MDU seeks to establish a minimum usage prior to the application of a supercompressibility fac-tor. At present, MDU's computers are incapable of programming to apply the supercompressibility factor. Thus, each customer's bill must be handbilled. This application was given interim approval on December 22, 1987, in Order No. 5315.

Decision

No party objected to any of the proposed changes in Docket Nos. 87.3.15, 87.10,59 or 87.10.78. The Commission hereby approves of the proposals.

CONCLUSIONS OF LAW

1. The Applicant, Montana-Dakota Utilities Company, furnishes gas service to consumers in the State of Montana and is a "public utility" under the regulatory jurisdiction of the Montana Public Service Commission. Section 69-3-101, MCA.

2. The Commission properly exercises jurisdiction over the Applicant's rates and operations. Section 69-3-102, MCA and Title 69, Chapter 3, Part 3, MCA.

3. The Commission has provided adequate public notice of all proceedings and an opportunity to be heard to all interested parties in this Docket. Section 2-4-601, MCA.

ORDER

NOW THEREFORE IT IS ORDERED that:

1. The complaints filed in Docket No. 87.1.8 are dismissed and Docket No. 87.1.8 is closed;

2. MDU's applications in Docket Nos. 87.3.15, 87.10.59 and 87.10.78 are approved;

3. MDU's gas transportation Rate 97 is terminated;

4. MDU's application in Docket No. 87.12.77 is granted subject to the modifications described in this order;

5. MDU shall file new tariffs for Rates 81, 82 and 90, that are in compliance with this order; the tariffs for proposed Rates 62 and 72 are approved.

DONE AND DATED at Helena, Montana this 10th day of November, 1988, by a vote of 5-0.

BY ORDER OF THE MONTANA PUBLIC SERVICE COMMISSION

CLYDE JARVIS, Chairman

JOHN B. DRISCOLL, Commissioner

HOWARD L. ELLIS, Commissioner

TOM MONAHAN, Commissioner

DANNY OBERG, Commissioner

ATTEST:

Carol Frasier
Commission Secretary

(SEAL)

NOTE: Any interested party may request that the Commission reconsider this decision. A motion to reconsider must be filed within ten (10) days. See ARM 38.2.4806.